BookletChart™

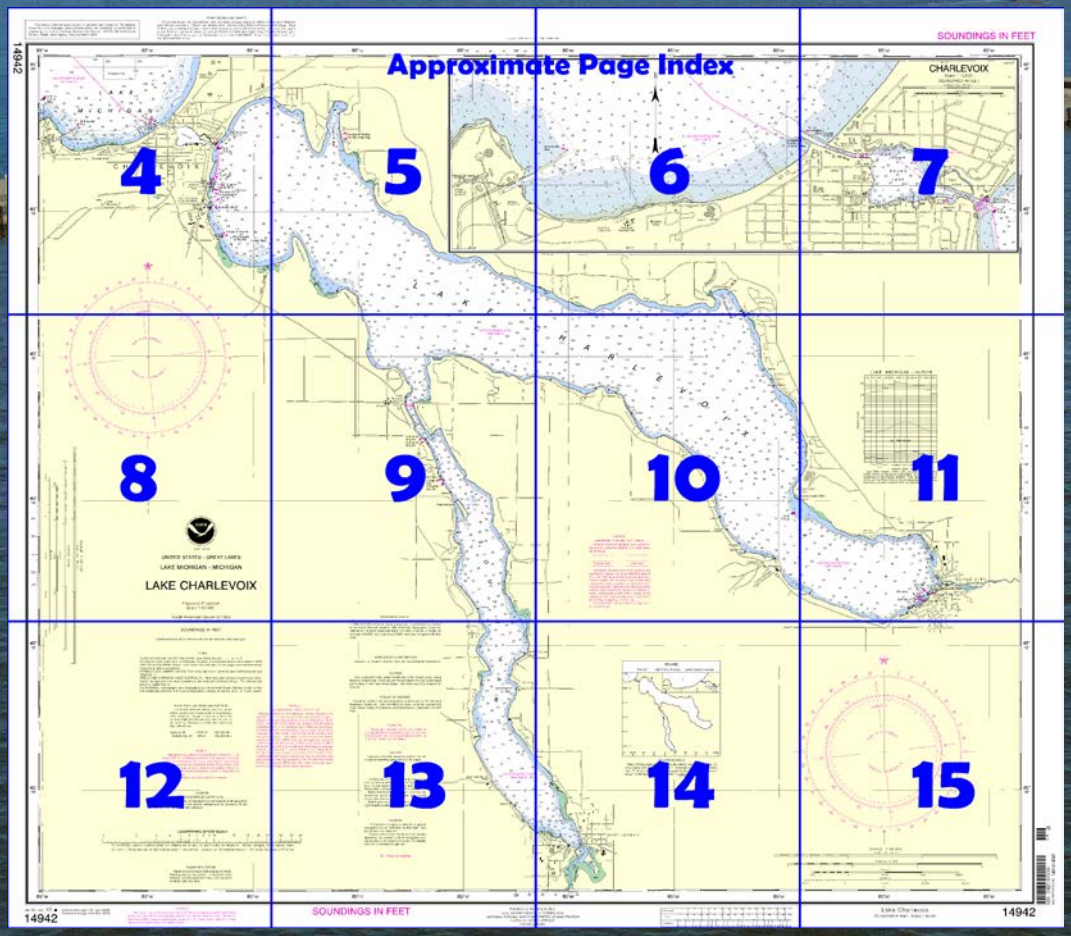
Lake Charlevoix

NOAA Chart 14942

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- *Complete, reduced-scale nautical chart*
- *Print at home for free*
- *Convenient size*
- *Up-to-date with Notices to Mariners*
- *Compiled by NOAA's Office of Coast Survey, the nation's chartmaker*



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

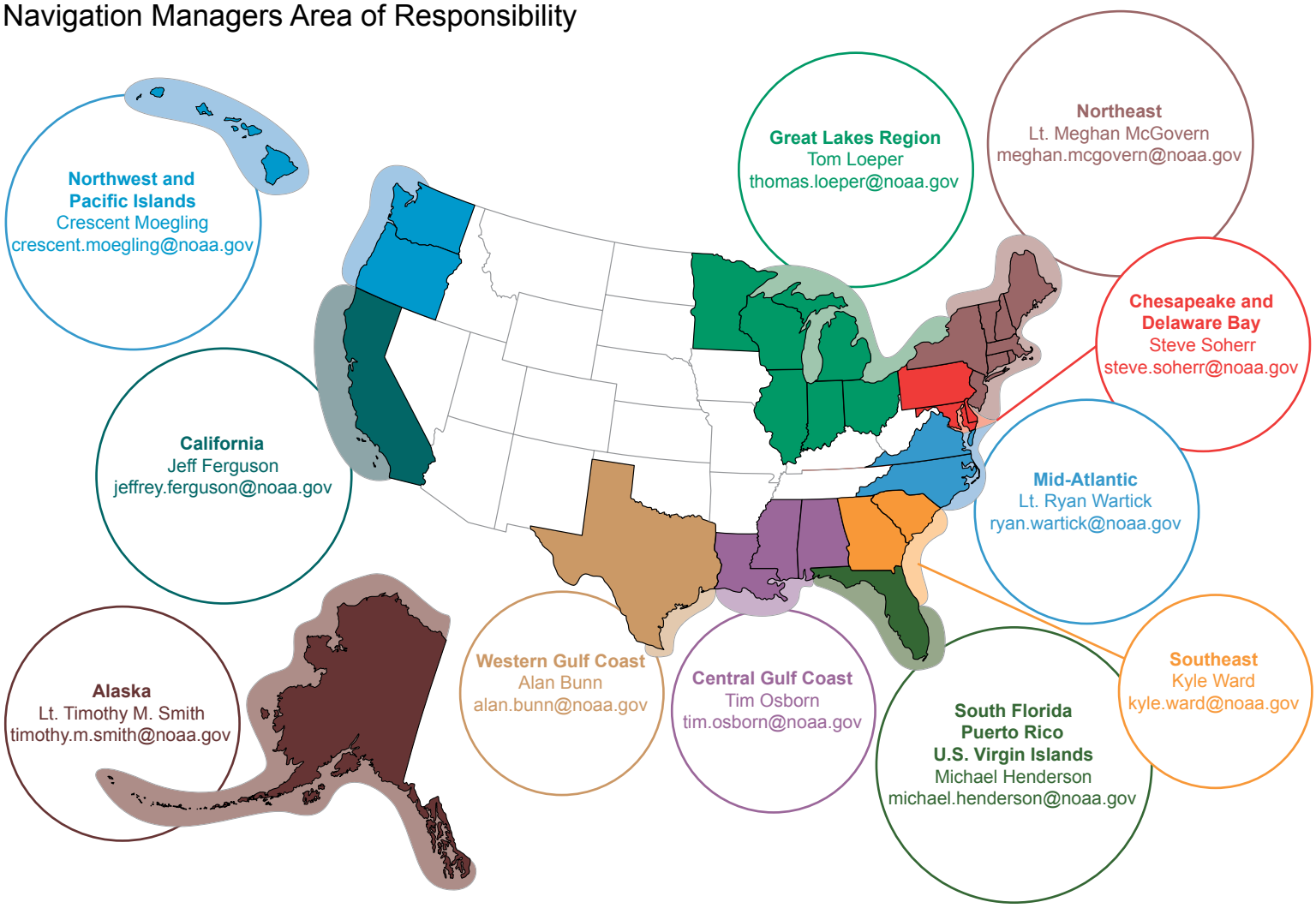
For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=14942.

(Selected Excerpts from Coast Pilot)
Charlevoix, MI, is a city and harbor at the mouth of **Pine River,** about midway of the rounding shore between Little Traverse Bay and Grand Traverse Bay.
Channels.–A dredged entrance channel leads southeast from Lake Michigan between parallel piers through the lower portion of Pine River to Round Lake, the harbor proper of Charlevoix. The outer ends of the piers are marked by lights. The light on the south pier has a fog signal that is operated by keying the microphone five times on VHF-FM channel 79. From the east end of Round Lake, a dredged channel leads southeast through the upper portion of Pine River to Lake Charlevoix, entered about 1 mile distant from the Lake Michigan shoreline. Mooring to the Government piers or revetments is prohibited.
In 2011, the controlling depths were 15 feet in the entrance to Round Lake, thence 16 feet in the dredged channel from Round Lake to Lake Charlevoix.
Round Lake, about 0.4 mile in diameter, has depths to 60 feet, with deep water generally close to shore. The lake has good anchorage.
Anchorages.–A special anchorage, marked by buoys in the north part of Round Lake, has good holding ground, sand and gravel bottom. (See **33 CFR 110.1 and 110.82,** chapter 2, for limits and regulations.)
Currents.–Currents in Pine River are reported to reverse twice daily with a velocity up to 3 mph. At times they may reach a velocity up to 5 mph.
Coast Guard.–Charlevoix Coast Guard Station is on the north side of the Pine River entrance to Lake Charlevoix.
Harbor regulations.–Federal regulations specify a **speed limit** of 8 mph (7 knots) in the harbor. (See **33 CFR 162.120,** chapter 2, for regulations.) Local harbor regulations have been established by the city of Charlevoix and are enforced by the **harbormaster.** A **slow-no wake speed** is enforced. Copies of regulations may be obtained from the Chief of Police, City Hall, 210 State Street, Charlevoix, MI 49720.
Lake Charlevoix extends about 14 miles southeast from the head of Pine River and is from 1 to 2 miles wide, with depths to over 100 feet and deep water generally close to shore. **Boyne City, MI,** is at the southeast end of the lake. A municipal marina at Boyne City provides transient berths, water, ice, electricity, sewage pump-out, and a launching ramp.
About 5 miles from the northwest end of Lake Charlevoix, **South Arm** extends 9 miles south from **Ironton** at the north end to **East Jordan** at the south end. A marina developed by the Michigan State Waterways Commission at East Jordan provides transient berths, gasoline, water, electricity, sewage pump-out, and harbormaster services. The harbormaster monitors VHF-FM channels 16 and 9.
A **slow-no wake speed** is enforced in the narrows of South Arm opposite Ironton. (See Small-craft Regulations, State of Michigan, chapter 3.)
Cable Ferry.–A cable ferry crosses South Arm at Ironton. The self-propelled ferry is guided across the 600-foot-wide channel by two cables which are anchored ashore and pass along each side of the ferry at deck level. The cables are at a depth of about 20 feet at midchannel when the ferry is docked on either shore. When the ferry is at midchannel, the cables are at their least depths. The ferry should not be passed within about 200 feet when docked at either shore. **DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.**
From Charlevoix W for 1.8 miles to **South Point** (45°19.3'N., 85°18.0'W.), shoals extend about 0.25 mile offshore. A lighted bell buoy marks the N extent of the shoals off South Point.
The Medusa Cement Co. has a facility for shipping cement and receiving coal on the east side of South Point about 1.5 miles west of Charlevoix. Lighted loading silos and the tallest stack (45°19'01.5"N., 85°18'00.8"W.) at the facility are prominent. A breakwater formed by two sunken barges extends about 1,600 feet lakeward from the shore and affords protection for the privately dredged channel along its S side and for the loading slip at its inner end. A private light marks the outer end of the breakwater. The entrance channel and slip are reported to be dredged to 24 feet annually. The slip is about 100 feet wide. The north side, 645 feet long, is used to ship cement. The south side, 556 feet long, is used to receive coal for plant consumption. The docks have a deck height of 10 feet, and there is silo storage for 120,000 tons of cement.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Cleveland	Commander 9th CG District Cleveland, OH	(216) 902-6117

Navigation Managers Area of Responsibility

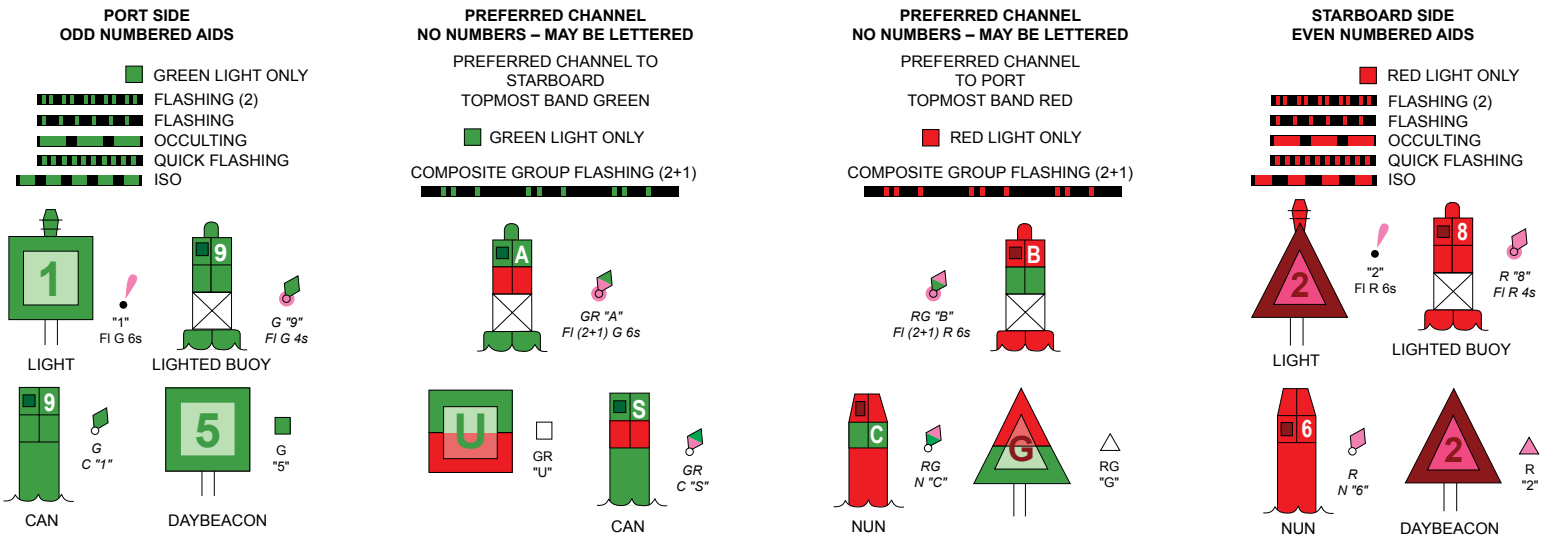


NOAA's navigation managers serve as ambassadors to the maritime community. They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit *nauticalcharts.noaa.gov/service/navmanagers*

To make suggestions or ask questions online, go to *nauticalcharts.noaa.gov/inquiry*.
To report a chart discrepancy, please use *ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx*.

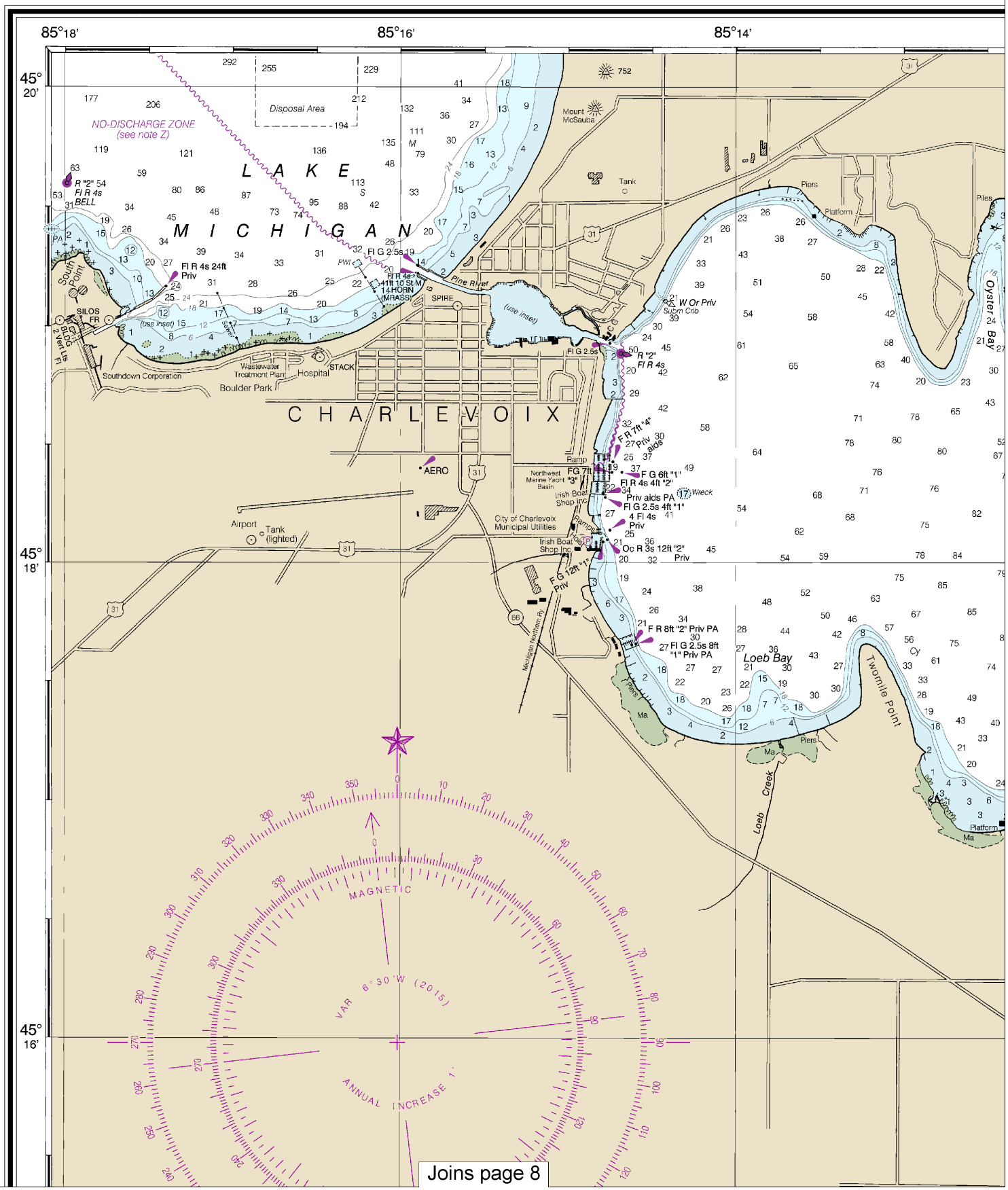
Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers



For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area. These volumes are available online at *http://www.navcen.uscg.gov*

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.



Joins page 8

4

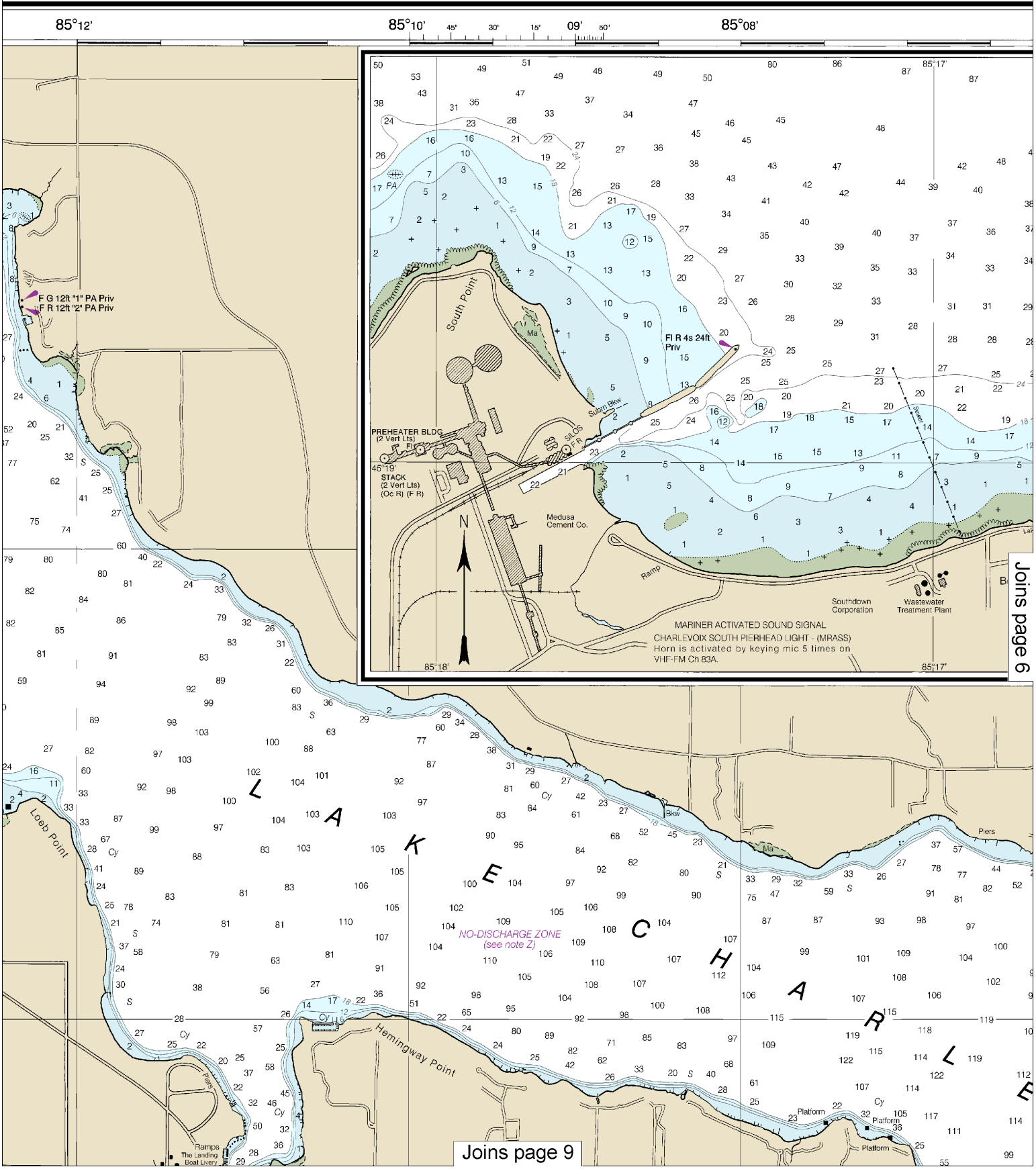
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:30,000~~

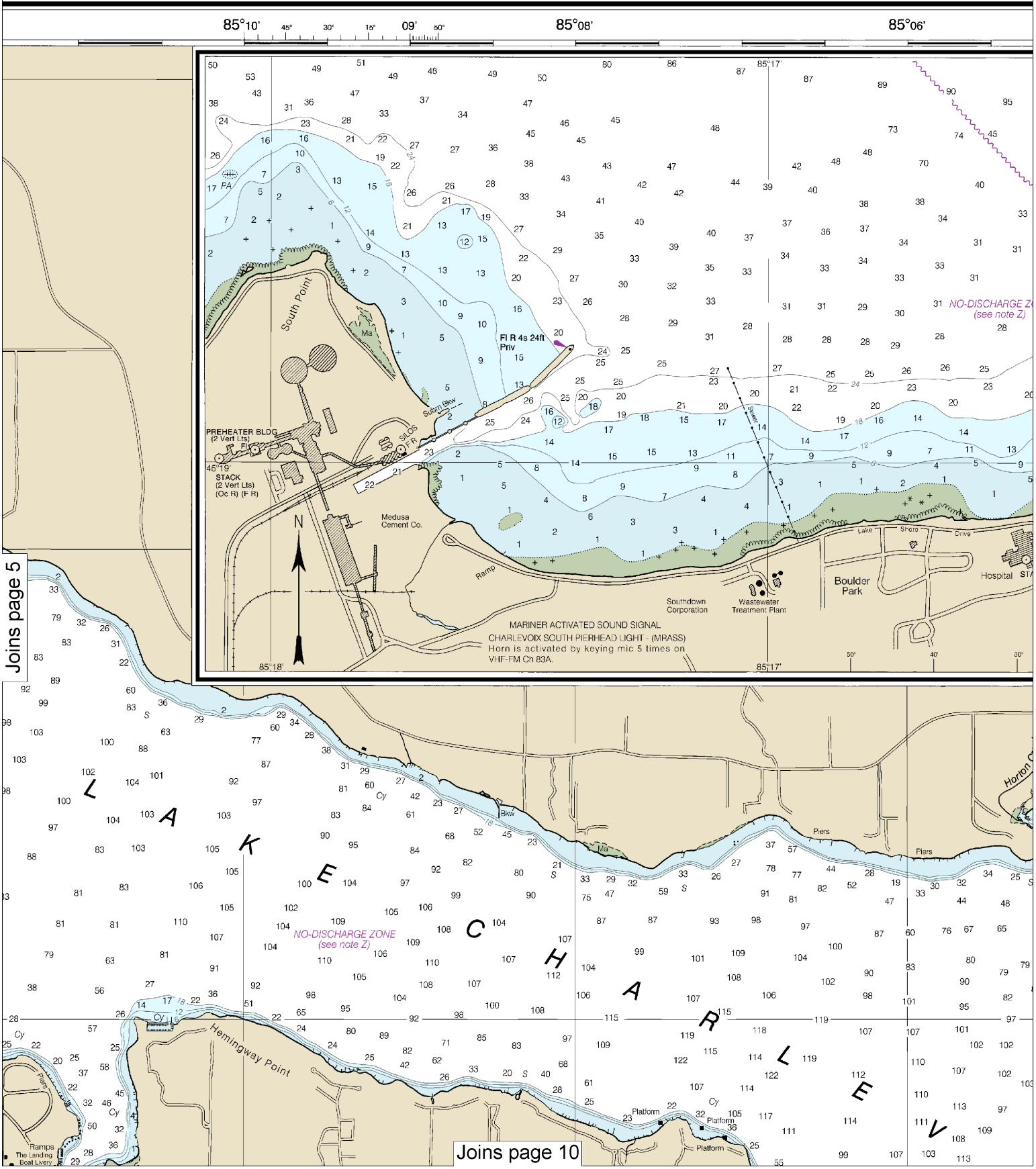
Nautical Miles: 1 0 1 2

Yards: 1000 0 1000 2000 3000

See Note on page 5.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:40000. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.



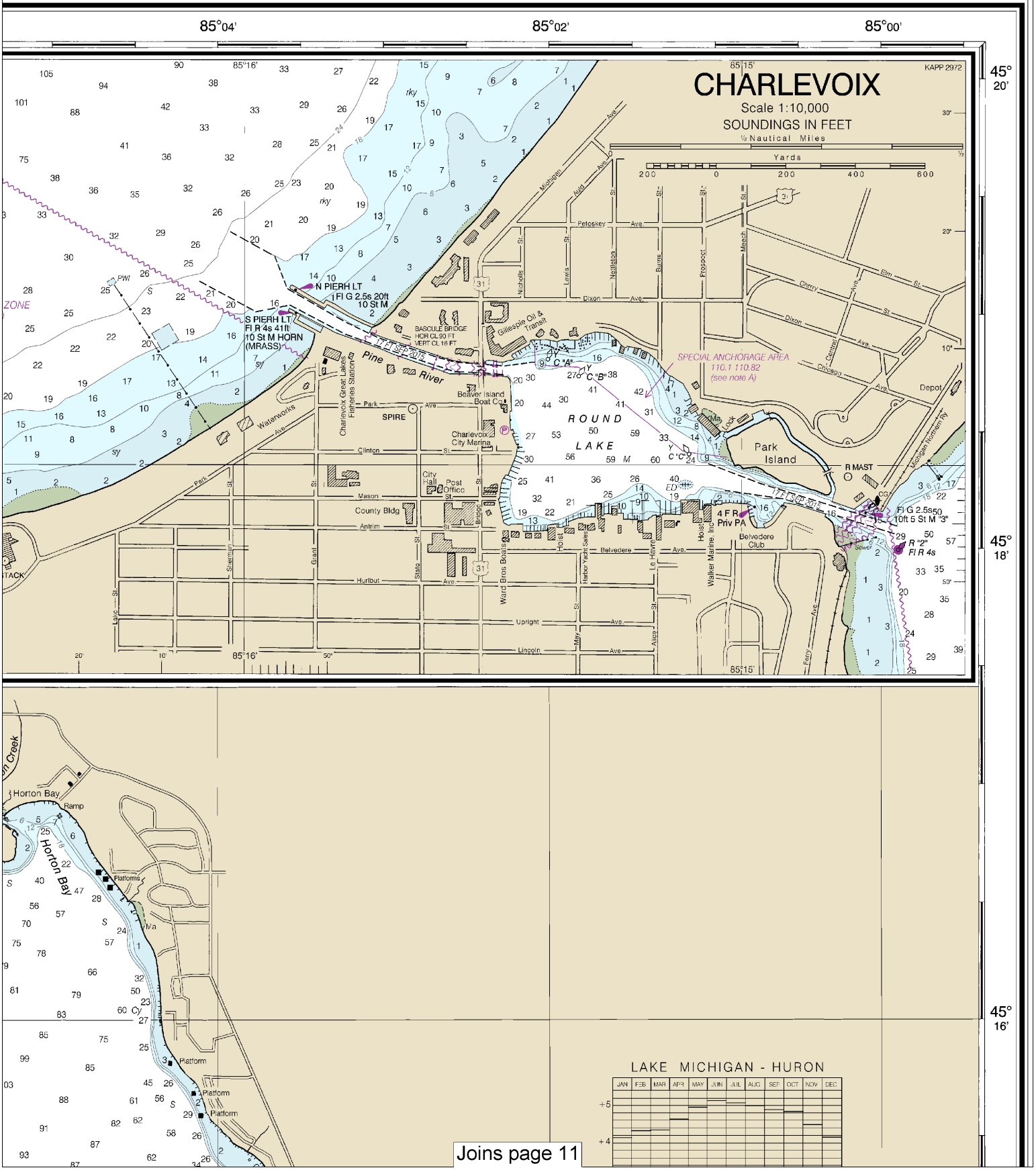
Printed at reduced scale. ~~SCALE 1:30,000~~

Nautical Miles: 1 0 1 2

Yards: 1000 0 1000 2000 3000

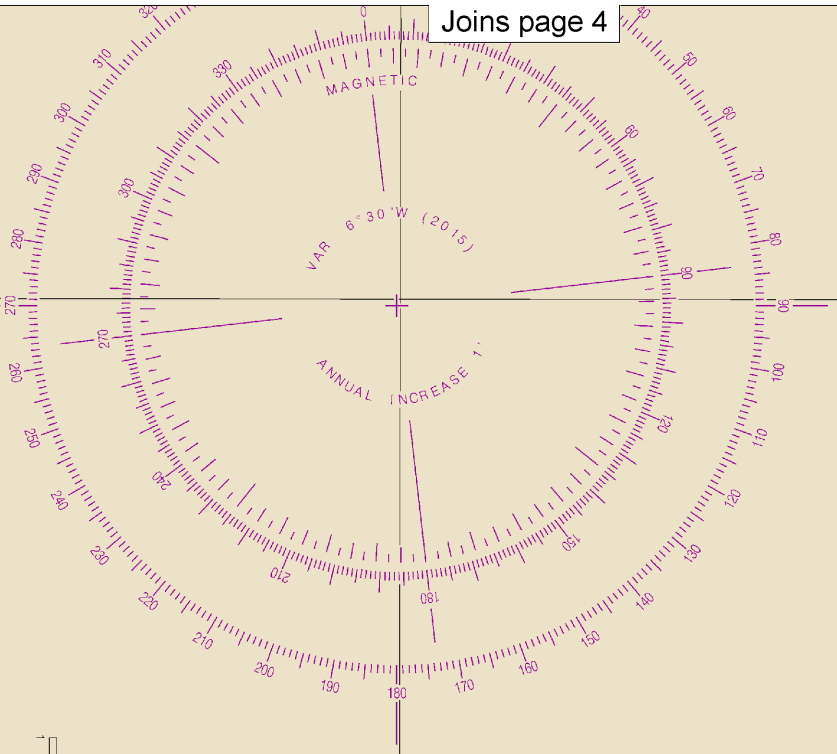
See Note on page 5.

Note: Chart grid lines are aligned with true north.



Last Correction: 12/9/2015. Cleared through:
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

Joins page 4



CABLE FERRY

Cable across the river may be at or
water surface. Mariners should exercise
when navigating in this area.

45° 16'

45° 14'

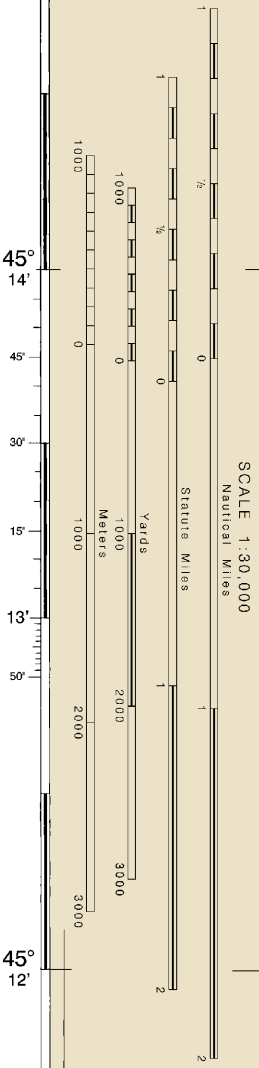
45° 12'

30'

15'

13'

50'



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - GREAT LAKES

LAKE MICHIGAN - MICHIGAN

LAKE CHARLEVOIX

Polyconic Projection
Scale 1:30,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov.

For Symbols and Abbreviations see Chart No. 1

NOTES

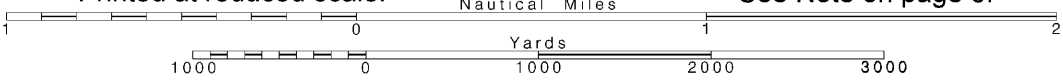
PLANE OF REFERENCE OF THIS CHART (Low Water Datum) ..... 577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985)
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information
concerning
SYMBOLS

Joins page 12

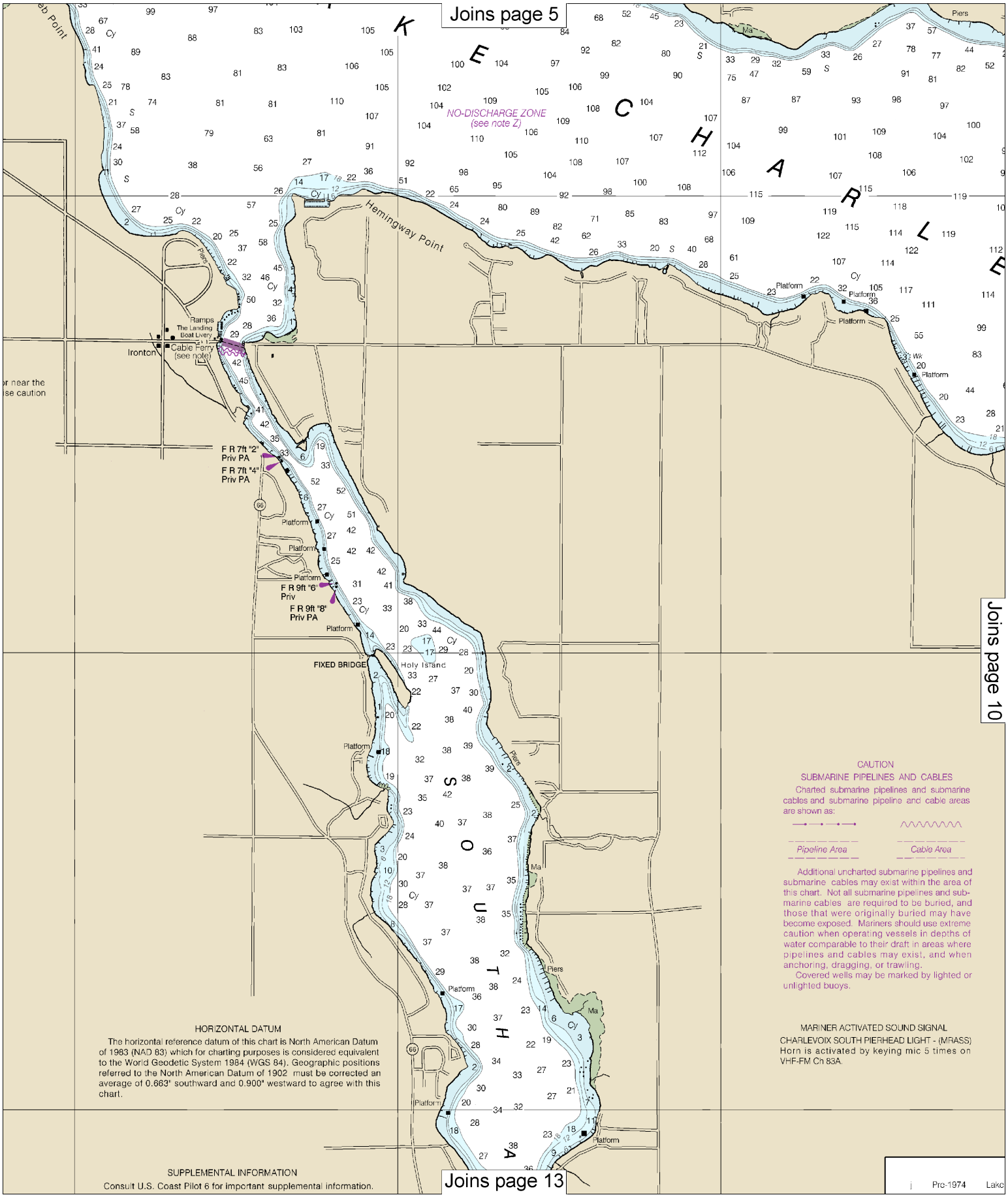
omplete list of symbols and abbreviations see

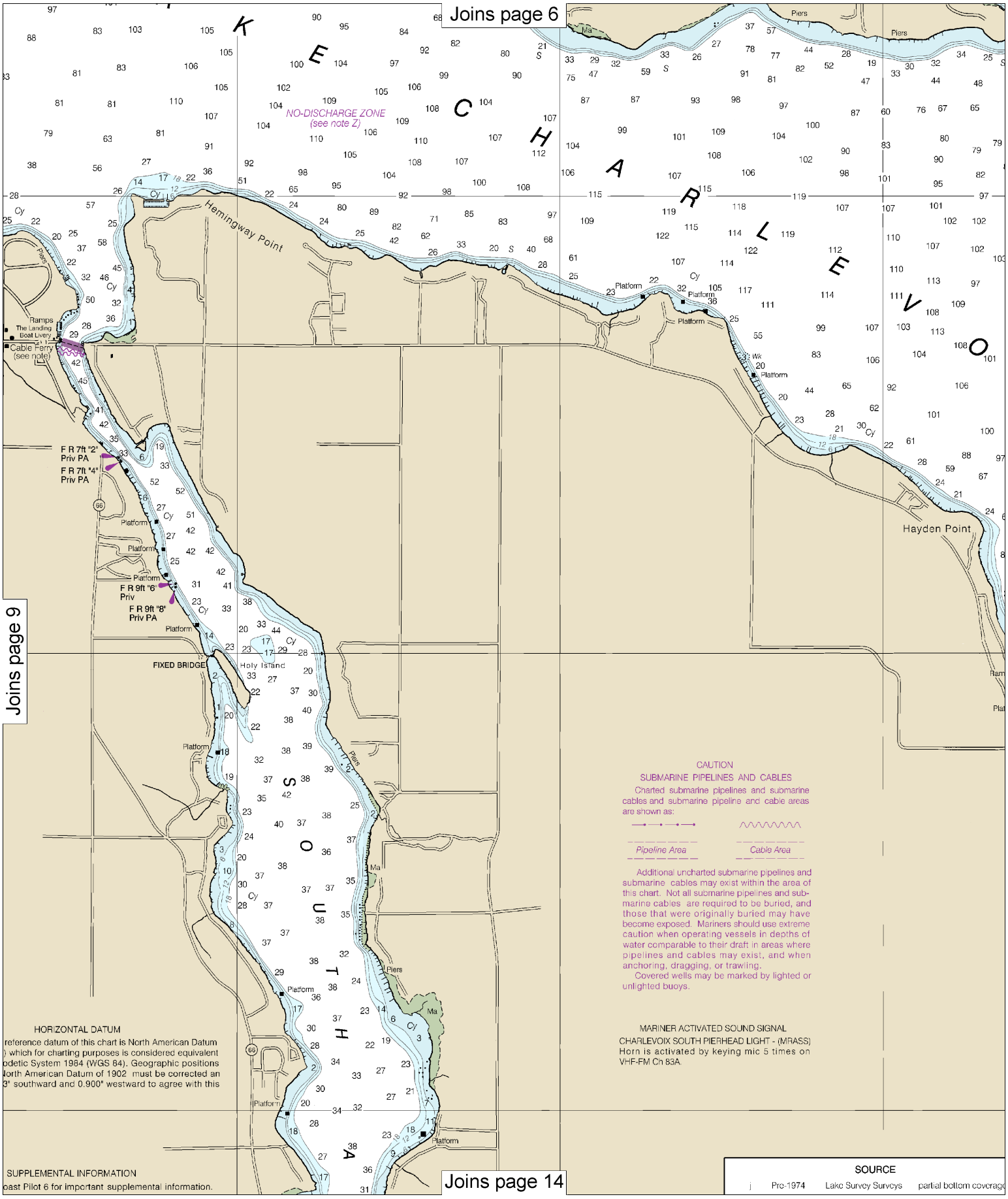
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:30,000~~



See Note on page 5.


Joins page 5
Joins page 10
Joins page 13
NO-DISCHARGE ZONE
(see note Z)
Hemingway Point
Ironton
Ramps
The Landing
Boat Livery
Cable Ferry
(see note)
F R 7ft "2"
Priv PA
F R 7ft "4"
Priv PA
F R 9ft "6"
Priv
F R 9ft "8"
Priv PA
FIXED BRIDGE
Holy Island
Platform
Piers
Ma
Cy
Wk
CHARLEVOIX SOUTH PIERHEAD LIGHT
CHARLEVOIX
SOUTH
CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:
Pipeline Area
Cable Area
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.
MARINER ACTIVATED SOUND SIGNAL
CHARLEVOIX SOUTH PIERHEAD LIGHT - (MRASS)
Horn is activated by keying mic 5 times on VHF-FM Ch 83A.
HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1902 must be corrected an average of 0.663" southward and 0.900" westward to agree with this chart.
SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.
Pre-1974



Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:30,000~~

Nautical Miles

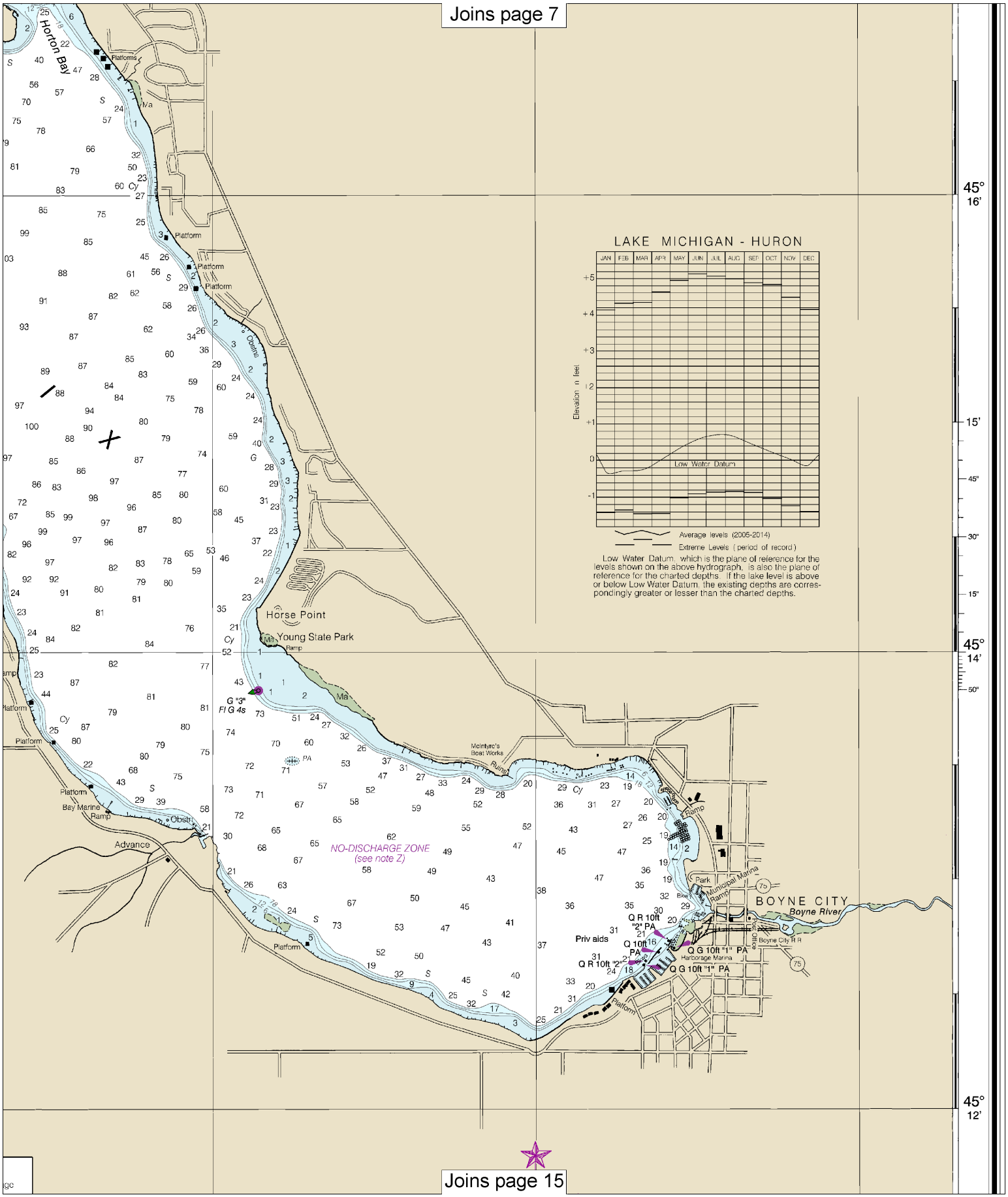
1 0 1 2

Yards

1000 0 1000 2000 3000

See Note on page 5.

Joins page 7



Joins page 15

Joins page 8

LAKE CHARLEVOIX

Polyconic Projection
Scale 1:30,000

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

Additional information can be obtained at nauticalcharts.noaa.gov.

For Symbols and Abbreviations see Chart No. 1

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) ..... 577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985)
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.
BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.
AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Gaylord, MI	WWF-70	162.500 MHz
Traverse City, MI	KIH-22	162.400 MHz

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 6. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 9th Coast Guard District in Cleveland, Ohio or at the Office of the District Engineer, Corps of Engineers in Detroit, Michigan.

Refer to charted regulation section numbers.

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

NOTE Z

NO-DISCHARGE ZONE, 40 CFR 140

Michigan waters of Lakes Michigan, Huron, Superior and St. Clair, all waterways connected thereto, ar inland lakes are designated as a No-Discharge (NDZ). Under the Clean Water Act, Section 312, all ve operating within a No-Discharge Zone (NDZ) are comp prohibited from discharging any sewage, treate untreated, into the waters. Commercial vessel sewage include graywater. All vessels with an installed m sanitation device (MSD) that are navigating, mo anchored, or docked within a NDZ must have the disabled to prevent the overboard discharge of se (treated or untreated) or install a holding tank. Regula for the NDZ are contained in the U.S. Coast P Additional information concerning the regulations requirements may be obtained from the Environm Protection Agency (EPA) web site: http://www.epa owow/oceans/regulatory/vessel_sewage/.

13'
50'
45° 12'
45° 10'
85°18'
85°16'
85°14'

27th Ed., Dec.2015

14942

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

SOUN

Last Correction: 12/9/2015. Cleared through:
LNM: 4616 (11/15/2016), NM: 4616 (11/12/2016), CHS: 1016 (10/28/2016)

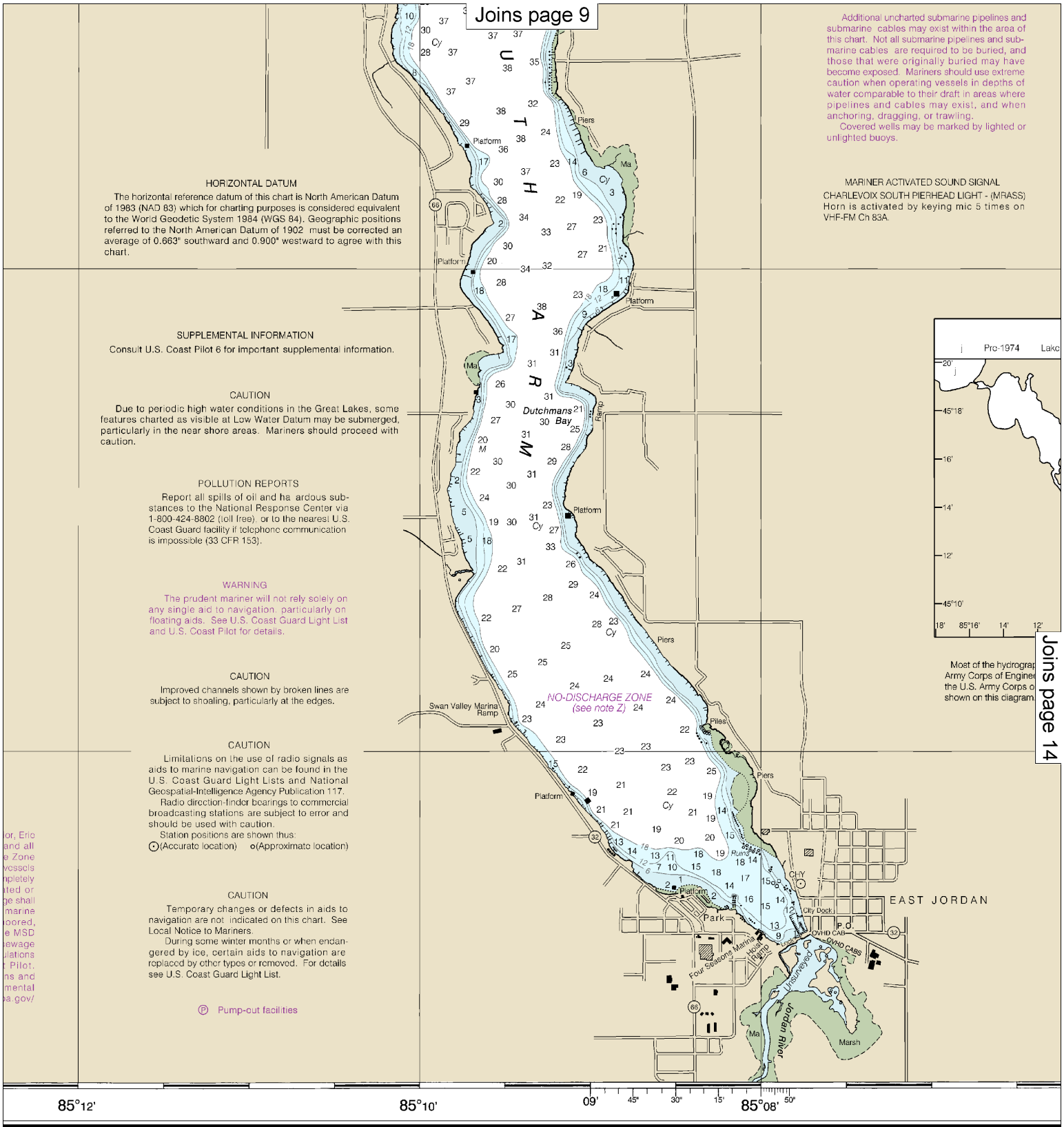
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:30,000~~

Nautical Miles: 1 0 1 2

Yards: 1000 0 1000 2000 3000

See Note on page 5.



SOUNDINGS IN FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

Joins page 10

Joins page 13

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

MARINER ACTIVATED SOUND SIGNAL

CHARLEVOIX SOUTH PIERHEAD LIGHT - (MRASS)
Horn is activated by keying mic 5 times on VHF-FM Ch 83A.

HORIZONTAL DATUM

reference datum of this chart is North American Datum) which for charting purposes is considered equivalent odetic System 1984 (WGS 84). Geographic positions lorth American Datum of 1902 must be corrected an 3" southward and 0.900" westward to agree with this

SUPPLEMENTAL INFORMATION

oast Pilot 6 for important supplemental information.

CAUTION

dic high water conditions in the Great Lakes, some as visible at Low Water Datum may be submerged, e near shore areas. Mariners should proceed with

POLLUTION REPORTS

port all spills of oil and ha ardous sub- es to the National Response Center via -424-8802 (toll free), or to the nearest U.S. Guard facility if telephone communication ossible (33 CFR 153).

WARNING

e prudent mariner will not rely solely on ingle aid to navigation, particularly on g aids. See U.S. Coast Guard Light List S. Coast Pilot for details.

CAUTION

channels shown by broken lines are hoaling, particularly at the edges.

CAUTION

ons on the use of radio signals as o marine navigation can be found in the Coast Guard Light Lists and National patial-Intelligence Agency Publication 117. dio direction-finder bearings to commercial casting stations are subject to error and d be used with caution. tion positions are shown thus: curate location) o(Approximate location)

CAUTION

emporary changes or defects in aids to ation are not indicated on this chart. See Notice to Mariners. uring some winter months or when endan- by ice, certain aids to navigation are ed by other types or removed. For details S. Coast Guard Light List.

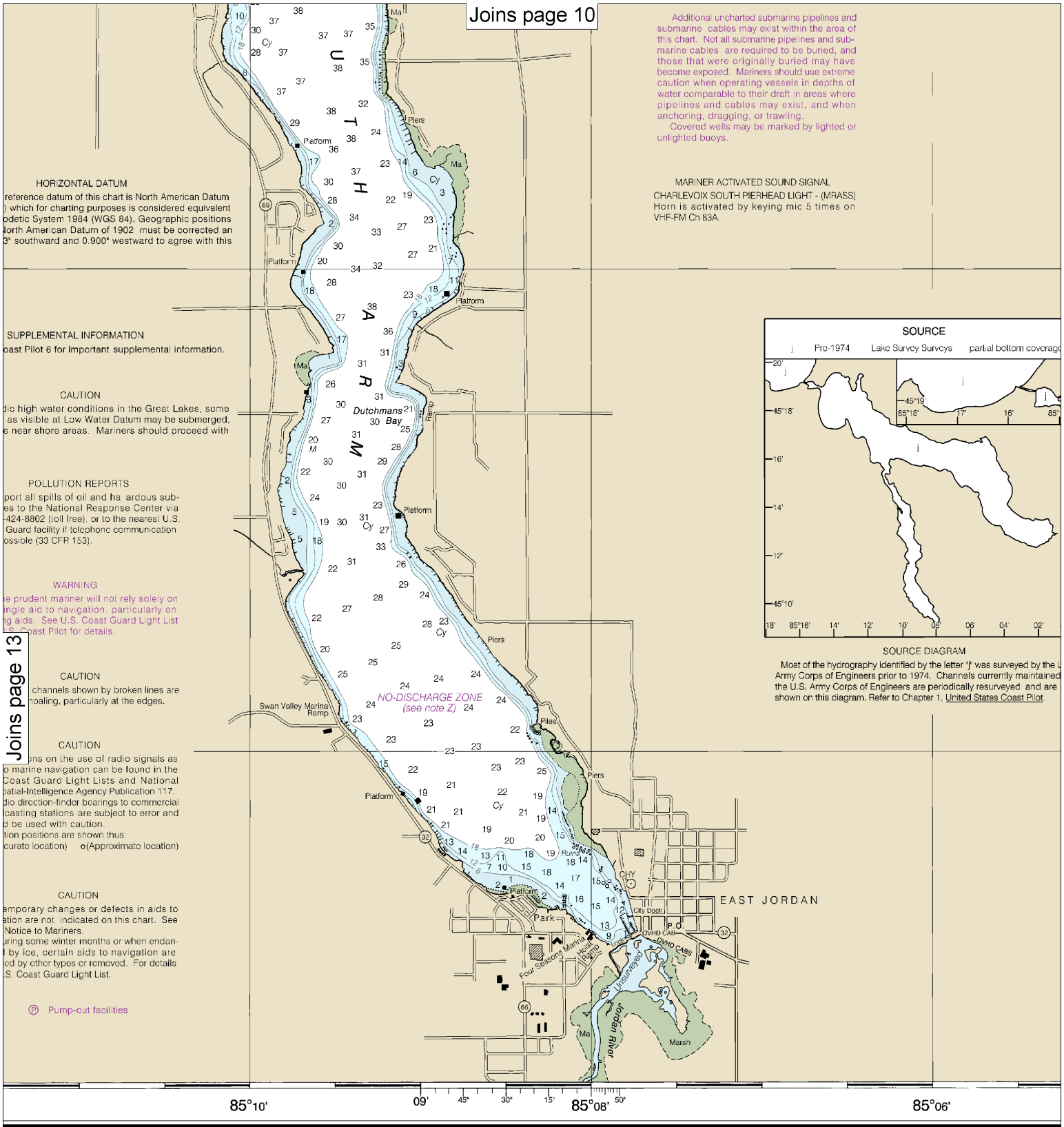
Ⓟ Pump-out facilities

SOURCE

j Pre-1974 Lake Survey Surveys partial bottom coverage

SOURCE DIAGRAM

Most of the hydrography identified by the letter "j" was surveyed by the U Army Corps of Engineers prior to 1974. Channels currently maintained the U.S. Army Corps of Engineers are periodically resurveyed and are shown on this diagram. Refer to Chapter 1, United States Coast Pilot.



FEET

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	
FEET	6	12	18	24	30	
METERS	1 2 3 4 5 6 7 8 9 10					

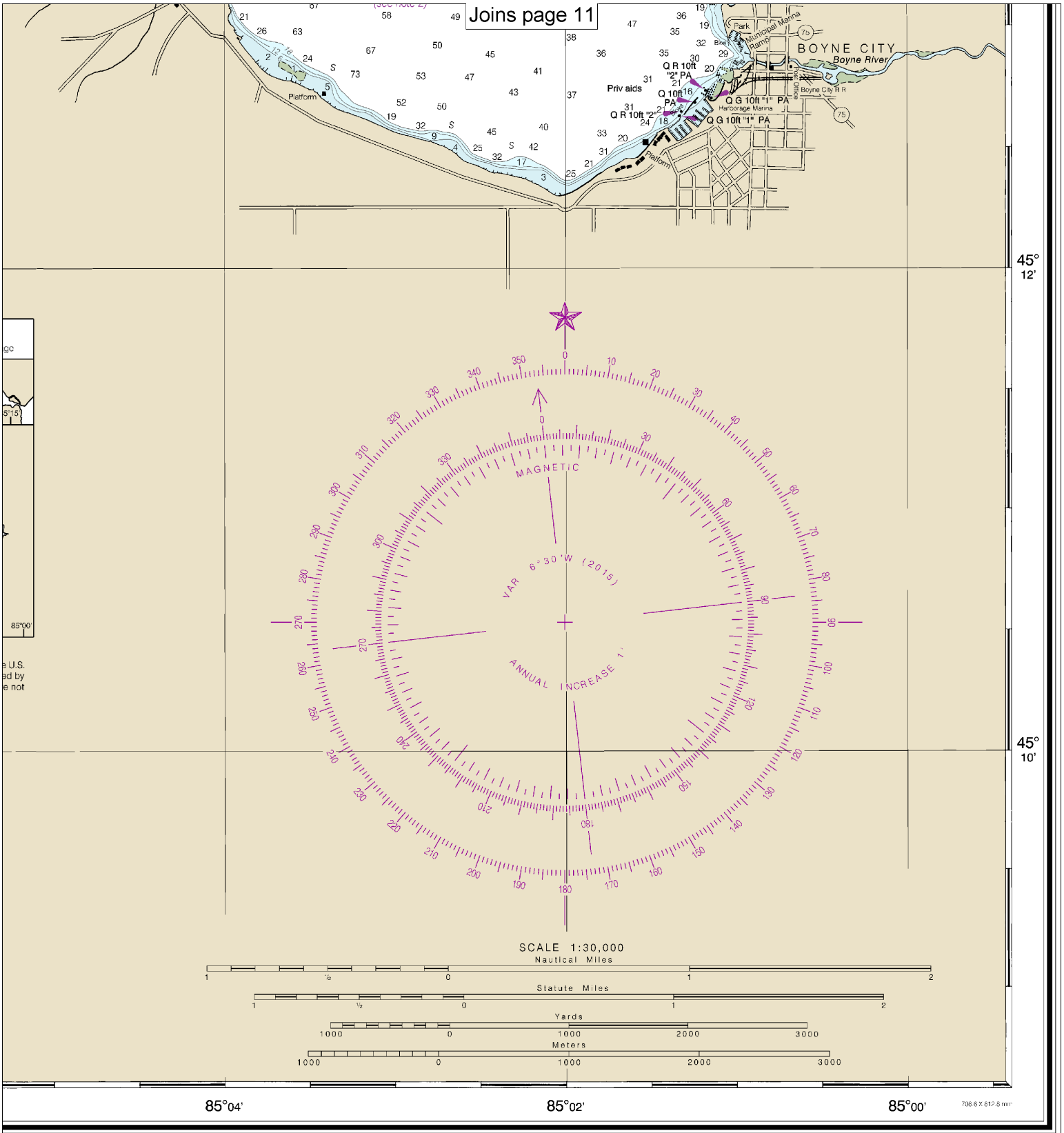
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:30,000~~

Nautical Miles: 1 0 1 2

Yards: 1000 0 1000 2000 3000

See Note on page 5.



Lake Charlevoix

SOUNDINGS IN FEET - SCALE 1:30,000

14942

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Interactive chart catalog	—	**http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

twitter —— For the latest news from Coast Survey, follow **@NOAAcharts**

This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey The Nation's Chartmaker